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- (54) Two-steps injection moulding process for producing hollow plastic automotive parts by using a rotating die apparatus
- (57) Bi-stage moulding process of plastic in the automotive, with rotating die apparatus for hollow plastic products of big section, in which the bi-stage moulding process of a product includes a second working stage, where the plastic moulding cycle with gas assisted injection is performed, which is performed under the skin with

respect to the element of partial aesthetic coating of the product, said element of partial aesthetic coating being obtained in a previous working stage including a first plastic injection moulding cycle.

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EUROPEAN SEARCH REPORT

Application Number EP 06 00 7430

	DOCUMENTS CONSID	ERED TO BE RELEVANT	ı			
Category	Citation of document with i of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
Υ	US 2002/140276 A1 (AL) 3 October 2002 * paragraph [0022]		1-3	INV. B29C45/16 B29C45/17		
Υ	DE 43 13 979 A1 (TO 4 November 1993 (19 * example 2 *	1-3	ADD. B29L22/00 B29L31/46 B29L31/30			
Α	JP 07 040384 A (KY0 10 February 1995 (1 * abstract *	DRAKU CO LTD) 1995-02-10)	1-4	D29L31/30		
А	JP 2001 334549 A (1 CO) 4 December 2001 * abstract *	DEMITSU PETROCHEMICAL (2001-12-04)	1-4			
Α	SA [FR]) 1 February	EYDEL DEV SA [FR] REYDEL (1995 (1995-02-01) (- column 2, line 18 * - line 12 *	1-4	TECHNICAL FIELDS SEARCHED (IPC)		
				B29C		
	The present search report has	been drawn up for all claims				
	Place of search	Date of completion of the search		Examiner		
	The Hague	7 March 2007	7at	toni, Federico		
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T : theory or principle E : earlier patent doc after the filing date her D : document cited in L : document cited fo	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filling date D: document cited in the application L: document oited for other reasons &: member of the same patent family, corresponding document			

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 06 00 7430

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-03-2007

	Patent document ed in search report		Publication date		Patent family member(s)	Publication date
US	2002140276	A1	03-10-2002	US	6669301 B1	30-12-200
DE	4313979	A1	04-11-1993	NONE		
JP	7040384	Α	10-02-1995	JP	3236709 B2	10-12-200
JP	2001334549	Α	04-12-2001	NONE		
EP	0636465	A1	01-02-1995	AT DE DE DE ES FR	153900 T 69403573 D1 69403573 T2 636465 T1 2067433 T1 2708229 A1	15-06-199 10-07-199 08-10-199 06-07-199 01-04-199 03-02-199
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